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Otto Pulkkinen

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NORRIS, MCLAUGHLIN & MARCUS, P.A.

875 THIRD AVE

18TH FLOOR

NEW YORK, NY 10022

EXAMINER

SEREBOFF, NEAL

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/691,787	Applicant(s) PULKKINEN ET AL.	
	Examiner Neal R. Sereboff	Art Unit 3626	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 April 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>3/19/2004, 4/20/2005</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Notice to Applicant

1. Claims 1 – 15 are pending and the Information Disclosure Statements (PTO-1449) submitted on 5/19/2004 and 4/20/2005 have been considered.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. **Claims 1 – 25** are rejected under 35 U.S.C. 102(e) as being anticipated by Wilkes et al., U.S. Pre-Grant Publication Number 2003/ 0144878.
4. As per claim 1, Wilkes teaches a method for generating interaction events associated with a tracking environment in substantially real time using substantially real time input interaction data collected by a plurality of automatic data collection systems comprising:
 - Receiving a plurality of substantially real time input interaction data streams generated at a plurality of respective automatic data collection systems (figure 1 where item #114 is the receiver);
 - Extracting the input interaction data from the data streams according to data format and detail definitions of the respective collection systems generating the interaction data streams (paragraphs 26, 27, 34 and 35);

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- Generating primary interaction events based on the extracted interaction data (paragraph 35 where the wristband identifies the patient having the procedure), wherein
 - The primary interaction events have a standardized processing format (paragraphs 35 and 36);
- Generating secondary interaction events based on the primary interaction events (paragraph 38 where the infusion is checked against the patient and paragraph 51 where the medication is checked); and
- Formatting the secondary interaction events for reception by at least one software application based on configuration requirements of the at least one software application (paragraphs 49 – 54).

5. As per claim 2, Wilkes teaches the method of claim 1 as described above. Wilkes further teaches the method comprising: transmitting the formatted secondary interaction events in substantially real time to the at least one software application (paragraph 53 where the medication is checked against a medical database).

6. As per claim 3, Wilkes teaches the method of claim 1 as described above. Wilkes further teaches the method comprising: filtering at least one of the primary and secondary interaction events to remove input interaction data according to predetermined criteria (paragraph 110).

7. As per claim 4, Wilkes teaches the method of claim 2 as described above. Wilkes further teaches the method comprising: formatting at least one of the primary interaction events for output in accordance with the configuration requirements of the at least one application (paragraph 169) and transmitting the primary interaction events formatted for output in substantially real time to the at least one application (paragraph 170).

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8. As per claim 5, Wilkes teaches the method of claim 1 as described above. Wilkes further teaches the method wherein at least one of the primary interaction events includes at least a location attribute (paragraph 28), an object/ person attribute (paragraph 27, medication) and a time attribute (paragraph 27).

9. As per claim 6, Wilkes teaches the method of claim 1 as described above. Wilkes further teaches the method comprising:

- Storing the primary interaction events and the secondary interaction events in a memory (paragraphs 69 and 74); and
- Following the storing and based on the configuration requirements for the at least one application, retrieving from the memory at least one of
 - (i) The stored primary interaction events and
 - (ii) The secondary interaction events, and using the retrieved interaction events for generating additional secondary interaction events (paragraphs 85 and 86 where the secondary event is a page).

10. As per claim 7, Wilkes teaches the method of claim 1 as described above. Wilkes further teaches the method wherein at least one of the secondary interaction events indicates co-location of at least two persons (figure 1 where the location is an examination room containing a patient and physician and the physician enters medication information about the patient).

11. As per claim 8, Wilkes teaches the method of claim 1 as described above. Wilkes further teaches the method wherein at least one of the secondary interaction events indicates co-location of at least one person with at least one object (figure 1 where the patient is interacting with the IV infusion system).

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12. As per claim 9, Wilkes teaches the method of claim 1 as described above. Wilkes further teaches the method wherein at least one of the secondary interaction events indicates co-location, for a predetermined time interval, of

(i) At least two persons or

(ii) At least one person with at least one object (figure 1 where the patient is interacting with the IV infusion system).

13. As per claim 10, Wilkes teaches the method of claim 1 as described above. Wilkes further teaches the method wherein the generating of the secondary interaction events is based on an interaction building rule corresponding to an activity of a process step performed by the at least one application (paragraph 154 where the scheduling is performed).

14. As per claim 11, Wilkes teaches the method of claim 1 as described above. Wilkes further teaches the method wherein the secondary interaction events are formatted for transmission to at least one of a billing software application (paragraph 85, billing), a clinical information application, a medication distribution tracking application and a process monitoring/ variance detection application and a process scheduling and resource management application.

15. As per claim 12, Wilkes teaches the method of claim 1 as described above. Wilkes further teaches the method comprising: filtering the primary interaction events to remove input interaction data according to predetermined criteria (paragraph 110), and wherein the generating secondary interaction events uses the filtered primary interaction events (paragraph 110 where new infusion orders are based upon old results).

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16. As per claim 13, Wilkes teaches a system for generating interaction events associated with a tracking environment in substantially real time using substantially real time input interaction data collected by a plurality of automatic data collection systems comprising:

- A plurality of listeners for interfacing with a plurality of respective automatic data collection systems, wherein the listeners in substantially real time forward substantially real time input interaction data streams provided by the respective collection systems (figure 1 where item #114 is the receiver and listeners include #112a and #118);
- A plurality of input data format converters respectively coupled to the plurality of listeners and for receiving the interaction data streams forwarded by the respective listeners (paragraphs 26, 27, 34 and 35);
- An interaction builder coupled to the input converters and to a plurality of output data format converters (figure 3, #302);
- A plurality of senders respectively coupled to the plurality output converters and for interfacing with a respective plurality of applications (figure 3, #126, #128 and #326);
- A configuration data database coupled to the input and output converters and the builder (figure 3, where the mediation management system combines the database with the builder);
- An interaction event data database coupled to the builder (figure 6, #546);
 - Wherein each of the input converters generates primary interaction event data based on the input interaction data stream received from the associated listener and data format and detail definitions of the collection system generating the input

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interaction data stream (paragraph 35 where the wristband identifies the patient having the procedure),

- Wherein the primary interaction event data has a standardized processing format (paragraphs 35 and 36),
- Wherein the configuration database contains the configuration requirements and the data definitions (MPEP 2106IIC. The Examiner notes that this limitation represents the intended use of the database and therefore has no patentable weight);
- Wherein the builder generates secondary interaction events based on the primary interaction events (paragraph 38 where the infusion is checked against the patient and paragraph 51 where the medication is checked); and
- Wherein the output converters format the secondary interaction events for reception by at least one of the software applications (paragraphs 49 – 54).

17. As per claim 14, Wilkes teaches the system of claim 13 as described above. Wilkes further teaches the system wherein the senders transmit to the respective software applications in substantially real time the formatted secondary interaction events received from the respective output converters (paragraph 53 where the medication is checked against a medical database).

18. As per claim 15, Wilkes teaches the system of claim 13 as described above. Wilkes further teaches the system comprising: a data reduction filter coupled to the builder, the configuration database and each of the input converters, wherein the reduction filter filters at least one of the primary and secondary interaction events to remove interaction data according to predetermined criteria (paragraph 110).

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19. As per claim 16, Wilkes teaches the system of claim 14 as described above. Wilkes further teaches the system wherein the builder transmits at least one of the primary interaction events received from the input converters to at least one of the output converters (paragraph 169) and wherein the output converter formats at least one of the primary interaction events for output to the application coupled to the sender associated with the output converter (paragraph 170).

20. As per claim 17, Wilkes teaches the system of claim 13 as described above. Wilkes further teaches the system wherein at least one of the primary interaction events includes at least a location attribute (paragraph 28), an object/ person attribute (paragraph 27, medication) and a time attribute (paragraph 27).

21. As per claim 18, Wilkes teaches the system of claim 13 as described above. Wilkes further teaches the system comprising an interaction event memory (paragraph 39, computer), wherein the builder stores the primary interaction events and the secondary interaction events in the interaction event memory (paragraph 45), and wherein the builder, based on the configuration requirements for the at least one application, retrieves from the memory at least one of

(i) The stored primary interaction events and

(i) The secondary interaction events and uses the retrieved interaction events to generate additional secondary interaction events (paragraphs 85 and 86 where the secondary event is a page).

22. As per claim 19, Wilkes teaches the system of claim 13 as described above. Wilkes further teaches the system wherein at least one of the secondary interaction events indicates co-

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location of at least two persons (figure 1 where the location is an examination room containing a patient and physician and the physician enters medication information about the patient).

23. As per claim 20, Wilkes teaches the system of claim 13 as described above. Wilkes further teaches the system wherein at least one of the secondary interaction events indicates co-location at least one person with at least one object (figure 1 where the patient is interacting with the IV infusion system).

24. As per claim 21, Wilkes teaches the system of claim 13 as described above. Wilkes further teaches the system wherein at least one of the secondary interaction events indicates co-location, for a predetermined interval, of

(i) At least two persons or

(ii) At least one person with at least one object (figure 1 where the patient is interacting with the IV infusion system).

25. As per claim 22, Wilkes teaches the system of claim 13 as described above. Wilkes further teaches the system wherein the secondary interaction events are generated based on an interaction building rule corresponding to an activity associated with a process step performed by the at least one application (paragraph 154 where the scheduling is performed).

26. As per claim 23, Wilkes teaches the system of claim 13 as described above. Wilkes further teaches the system wherein the secondary interaction events are formatted for transmission to at least one of a billing software application (figure 1 and paragraph 85, billing), a clinical information application, medication distribution tracking application, a process monitoring/ variance detection application and a process scheduling and resource management application.

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27. As per claim 24, Wilkes teaches the system of claim 13 as described above. Wilkes further teaches the system wherein the data collection systems includes at least one of an radio frequency identification system, a smart-card reader system, an indoor location system, a voice recognition system, a bar coding system, a biometric recognition system and a machine vision system (figure 8 and 9, bar coding).

28. As per claim 25, Wilkes teaches the system of claim 13 as described above. Wilkes further teaches the system comprising: a data reduction filter coupled to the builder, the configuration database and each of the input converters, wherein the reduction filter filters the primary interaction events to remove interaction data according to predetermined criteria (paragraph 110), and wherein the builder generates secondary interaction events based on the filtered primary interaction events (paragraph 110 where new infusion orders are based upon old results).

Conclusion


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Neal R. Sereboff whose telephone number is (571) 270-1373. The examiner can normally be reached on Mon thru Thur from 7:30am to 5pm, with 1st Fri off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Thomas can be reached on (571) 272-6776. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/NRS/
10/4/2007



JEFFREY A. SMITH
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600